0.05 to 10 wt% palladium and from 0.05 to 10 wt% platinum, or (3) from 0.05 to 10 wt% nickel, based on the total weight of the catalyst composition; and having a specific surface area of from 50 to 150 m^2/g after stabilization by burning at a temperature of from 550 to 800°C, wherein the hydrodesulfurization and isomerization are simultaneously achieved with the catalyst composition.

A1

2. (Amended) The catalyst according to claim 1, wherein the catalyst comprises the (2) from 0.05 to 10 wt% palladium and from 0.05 to 10 wt% platinum, and wherein the atomic ratio of the platinum to the palladium is from 0.1 to 4.0.

4. (Amended) A method for the simultaneous hydrodesulfurization and isomerization of a light hydrocarbon oil, comprising bringing a light hydrocarbon oil having a sulfur content of 700 ppm by weight or lower and hydrogen into contact with the catalyst composition of claim 1 under reaction conditions of a temperature of from 140 to 400°C, a pressure of from 1.0 to 4.5 MPa, an LHSV of from 1.0 to 10 h^{-1}, and an H_2/oil ratio of from 1 to 3 mol/mol.

A2

5. (Amended) The method according to claim 4, wherein the catalyst comprises the (2) from 0.05 to 10 wt% palladium and from 0.05 to 10 wt% platinum, and wherein the atomic ratio of the platinum to the palladium is from 0.1 to 4.0..

Please ~~add~~ the following new claims:

7. (New) The catalyst according to claim 1, wherein the catalyst comprises the support comprising zirconium oxide or a zirconium hydroxide; from 1 to 3 wt% sulfuric acid radicals in terms of a sulfur amount based on the total weight of the catalyst composition; and

A3

from 0.05 to 10 wt% palladium and from 0.05 to 10 wt% platinum, based on the total weight of the catalyst composition.

8. (New) The catalyst according to claim 7, wherein the atomic ratio of the platinum to the palladium is from 0.1 to 4.

9. (New) A process for producing the catalyst composition of claim 7, comprising:

(1) treating a zirconium hydroxide with a substance giving sulfuric acid radicals; impregnating the resultant treated material with a palladium compound and a platinum compound and burning the impregnated material at a temperature of from 550 to 800°C;

(2) treating a zirconium hydroxide with a substance giving sulfuric acid radicals, burning the treated material at a temperature of from 550 to 800°C; impregnating the resultant burned material with a palladium compound and a platinum compound and burning the impregnated material at a temperature of from 300 to 700°C;

(3) kneading a zirconium hydroxide, a substance giving sulfuric acid radicals, and a palladium compound and a platinum compound and burning the mixture at a temperature of from 550 to 800^{0}C; or

(4) kneading a zirconium hydroxide and a substance giving sulfuric acid radicals; burning the mixture at a temperature of from 550 to 800^{0}C; impregnating the resultant burned material with a palladium compound and a platinum compound and burning the impregnated material at a temperature of from 300 to 700^{0}C.

10. (New) The method according to claim 9, wherein the atomic ratio of the platinum to the palladium compound is from 0.1 to 4.